

### 3.5 Resource Protection Action Plan

#### Background

The Resource Protection Action Plan (RPAP) makes recommendations to enhance the protection of sanctuary resources from various threats and addresses the enforcement of sanctuary and other regulations to enhance the quality of the FGBNMS ecosystem. The management plan review public scoping process identified several issues of concern including: law enforcement, impacts from pollutant discharge, and fishing activities. The sanctuary advisory council formed several subcommittees to address these issues. In addition, a FGBNMS Law Enforcement Summit was held in Galveston, Texas in April 2007.

#### Purpose

The purpose of the RPAP is to improve sanctuary resource and ecosystem protection. This action plan contributes to the FGBNMS *Goal 1*—Protect, maintain and, where appropriate, restore and enhance the resources and qualities of Flower Garden Banks National Marine Sanctuary and the ecosystem that supports it.

#### Strategies and Activities

The RPAP has two strategies and associated activities to protect sanctuary resources from various threats:

##### RP.1 – Enhance enforcement efforts.

- Activity 1.1 Incorporate surveillance and enforcement into the mission plan for the R/V *Manta*.
- Activity 1.2 Develop a process for voluntary incident reporting of possible FGBNMS regulation violations.
- Activity 1.3 Improve interagency coordination with federal and state enforcement agencies.

##### RP.2 – Increase protection of sanctuary resources from potential threats.

- Activity 2.1 Investigate the potential designation of the sanctuary as an “Area to be Avoided” by the International Maritime Organization (IMO).
- Activity 2.2 Revise FGBNMS regulations to prohibit attracting, touching, or disturbing rays and whale sharks.
- Activity 2.3 Evaluate the need for additional measures to protect resources from impacts associated with inappropriate fishing gear.
- Activity 2.4 Work with the U.S. Coast Guard to revise and implement a specific pollutant spill contingency plan for the FGBNMS area.
- Activity 2.5 Revise regulations to improve protection for sanctuary resources from pollutant discharge impacts.
- Activity 2.6 Address the impacts of climate change on sanctuary resources.

##### **RP.1 Enhance enforcement efforts.**

Enforcement and surveillance are logistically difficult at the Flower Garden and Stetson Banks due to their distance from shore. Therefore, the sanctuary relies heavily on assistance from the U.S. Coast Guard (USCG) and the NOAA Office for Law Enforcement (OLE) for enforcement efforts. Only recently has the sanctuary acquired a dedicated vessel, the R/V *Manta*, which can be used as a platform for USCG and OLE law enforcement staff to supplement the sanctuary enforcement

presence at the Flower Garden and Stetson Banks. This vessel has the ability to elevate onsite sanctuary surveillance and monitoring. Further, FGBNMS will increase collaboration with both federal and state law enforcement agencies, including OLE, the USCG, and the Texas and Louisiana state law enforcement agencies.

### **Activity 1.1 Incorporate surveillance and enforcement into the mission plan for the R/V *Manta*.**

The addition of the R/V *Manta* to the sanctuary infrastructure will greatly improve the ability of sanctuary staff to have an on-the-water enforcement presence at the banks. In addition to its research and education mission, the vessel will be used to make specific surveillance runs with law enforcement personnel. As appropriate, some surveillance can be conducted from the vessel in tandem with non-enforcement-related missions. Sanctuary staff will coordinate with OLE and the USCG to have enforcement authorities on board for enforcement missions.

### **Activity 1.2 Develop a process for voluntary incident reporting of possible FGBNMS regulation violations.**

The sanctuary's distance from shore means that sanctuary staff cannot have a physical presence on the water most of the time. However, the sanctuary is regularly visited by fishers, divers and oil industry personnel. These visitors are able to assist sanctuary staff through direct voluntary reporting of trip observations. For example, sighting cards are currently available on the sanctuary website for reporting observations of sharks and rays, Whale Sharks, sea turtles, and octopus and squid. Visitors submit the completed cards to the research coordinator, who enters the information into a database ([http://flowergarden.noaa.gov/visiting/report\\_observations.html](http://flowergarden.noaa.gov/visiting/report_observations.html)).

The Flower Garden Banks Law Enforcement Summit recommended development and use of a similar voluntary incident reporting form to gather information from interested parties on potential sanctuary violations and acquire knowledge of activities occurring within the sanctuary. The form would be posted on the sanctuary website with the sighting cards. A visitor could fill out the incident report form and submit it directly to the sanctuary office through email. Sanctuary staff would then follow up with OLE, as appropriate.

### **Activity 1.3 Improve interagency coordination with federal and state enforcement agencies.**

FGBNMS will work with both state and federal enforcement agencies to increase cooperation and communication. FGBNMS will continue to work closely with OLE and the USCG to address enforcement needs within the sanctuary. Both OLE and USCG are represented on the sanctuary advisory council and fully participate on enforcement-related issues and working groups. The USCG has many operational assets that may be available to assist with enforcement requirements. Vessels stationed at Galveston and Freeport, TX conduct patrols in the vicinity of the sanctuary and can enforce sanctuary regulations. The USCG Air Station in Corpus Christi, TX routinely conduct aerial surveillance in the northern Gulf of Mexico, including FGBNMS. Information on vessel activity and potential enforcement issues are reported when observed. FGBNMS will conduct periodic updates and training for USCG personnel to ensure that they are informed about sanctuary regulations and policies. If appropriate, FGBNMS will pursue formal agreements with USCG on enforcement and resource protection issues.

FGBNMS will pursue increased cooperation with state enforcement agencies in Texas and Louisiana. State law enforcement personnel can be authorized to enforce federal regulations in areas outside of state waters through cooperative agreements signed between the states and federal law enforcement agencies. Two documents define this cooperative relationship between federal and state agencies: the Cooperative Enforcement Agreement (CEA) and state Joint Enforcement Agreements (JEAs). The CEA is an overarching agreement that deputizes and authorizes state marine conservation law enforcement officers to enforce federal regulations, including the National Marine Sanctuaries Act, the Magnuson-Stevens Fishery Conservation and Management Act, and the Marine Mammal Protection Act. A JEA is an agreement between an individual state and OLE that authorizes federal funding to support state efforts in federal law enforcement. JEAs provide detailed information about the types of programs targeted for increased enforcement, the resources the federal agency will provide in support of the JEA, and equipment or property that will be purchased with JEA funds. Both Texas and Louisiana have an existing JEA. These agreements will be explored as potential mechanisms to increase enforcement activities within the sanctuary.

**RP.2 Increase protection of sanctuary resources from potential threats.**

A number of potential threats to sanctuary resources were identified through the management plan review process. Several of these were further evaluated for immediate action. For example, there is a potential for physical injury to wildlife and habitat in the sanctuary from shipping, fishing activities and diver interactions. Additionally, the discharge of pollutants from sources inside and outside the sanctuary may have detrimental impacts on water quality. To protect against some of these threats, changes to FGBNMS regulations will be evaluated and implemented, if appropriate. Impacts from oil spills and other hydrocarbons will be addressed through a sanctuary-specific planning and response process.

**Activity 2.1 Investigate the potential designation of the sanctuary as an “Area to be Avoided” by the International Maritime Organization**

In the past, injuries to sanctuary resources have been caused by anchoring, improperly attended cables from towed exploration equipment, and cables connecting tugs and towed barges. These impacts could be reduced through the designation of the sanctuary as an “Area to be Avoided” (ATBA). The International Maritime Organization (IMO), through the Maritime Safety Committee, can designate marine ATBAs for the purposes of navigational and environmental safety. The IMO defines an ATBA as a routing measure within a defined area in which either navigation is particularly hazardous or it is exceptionally important to avoid casualties, and which should be avoided by all ships or certain classes of ships. An ATBA can be either voluntary or mandatory and applies to all domestic and international vessels. Federal regulations can be promulgated to mirror the international regulation and would apply to all domestic vessels as well.

FGBNMS staff will work with the shipping industry, USCG, enforcement entities and the sanctuary advisory council to determine if the sanctuary requires the protections afforded by ATBA status. Designating an ATBA requires application for the routing measure through the Maritime Safety Committee of the IMO. The sanctuary would then work with the NOAA Office of General Counsel International Law to develop the application and supporting information, and to navigate the clearance and approval process for NOAA and the IMO.

**Activity 2.2    Revise FGBNMS regulations to prohibit attracting, touching, or disturbing rays or whale sharks.**

Approximately 20 species of sharks and rays have been documented at the Flower Garden and Stetson Banks, some seasonal, others year-round. Whale sharks and rays are transient creatures and migrate between areas for feeding and mating. During the winter months, Spotted Eagle Rays (*Aetobatus narinari*) are common visitors to all three banks. The reason for the seasonality of their visits is unclear, but their occurrence is quite predictable. Summer months usually bring Whale Sharks (*Rhincodon typus*) to the area. These filter-feeding creatures can reach over 30 feet (9 meters) in length. Manta Rays (*Manta birostris*) and the very similar-looking mobula rays (*Mobula* spp.) are regular visitors to the sanctuary throughout the year. At least 58 different individual manta rays have been documented and identified by distinctive markings on their undersides. Recent acoustic tracking of the manta rays has revealed that they are moving between the three banks of the sanctuary.



*A diver looks on as a Manta Ray moves by undisturbed. Photo: FGBNMS*

Divers can physically harm rays and whale sharks by attracting, touching, riding or pursuing the animals, which can then expose the animals to other potential injuries. In particular, people can cause injury to the skin of the animal through touching. The animals may actively avoid diver interactions by changing direction or diving, and may exhibit stress behavior such as violent shuddering. When these types of responses occur, rays and Whale Sharks expend energy that could otherwise be used for feeding and other natural activities.

Whale sharks and rays are not listed under the Endangered Species Act (ESA) or designated as depleted under the Marine Mammal Protection Act (MMPA), and are therefore not protected from harassment and injury in the same manner as threatened and endangered species under the ESA or depleted marine mammals under the MMPA. Therefore, NOAA proposes to strengthen the protection of rays and whale sharks from physical harm and harassment by developing regulations to

prohibit attracting, touching, or disturbing the swimming or feeding behaviors of these animals. The purpose of the regulations is to reduce adverse human interactions with rays and whale sharks.

**Activity 2.3 Evaluate the need for additional measures to protect resources from impacts associated with inappropriate fishing gear.**

The impacts of fishing and fishing activities on marine resources within the sanctuary have not been precisely documented. The use of conventional hook and line fishing gear is allowed in the sanctuary, however impacts can still occur. In addition, illegal fishing by both commercial longliners and recreational spearfishers has been observed. Lost or tangled bottom fishing gear has been found on numerous occasions, as well as lost spearfishing equipment. SCUBA divers have also documented discarded fishing bycatch (such as dead sharks and other marine life) within the sanctuary.

During public scoping, the impact of fishing was identified as a priority issue. Many people commented that the sanctuary should consider the use of no-take marine reserves within all or part of FGBNMS, or strengthening certain restrictions on allowable fishing gear. It was determined that while not enough information was available to warrant closing all or portions of the sanctuary to fishing, an experiment should be conducted to evaluate whether fishing activity is having a significant detrimental impact on sanctuary resources (see Strategy RM.4). In addition, the sanctuary advisory council, through its fishing impacts subcommittee, explored several other regulatory options for protecting sanctuary resources from fishing impacts, including: implementing an allowable gear fishing regulation (i.e., specifying what gear is allowed, rather than what gear is prohibited); restricting hook and line fishing to a maximum of three hooks; prohibiting the use of electric-powered reels; prohibiting bottom contact by fishing gear; and/or restricting the amount of weight that can be used on fishing lines. Over the next few years, sanctuary staff will conduct a deliberative process to evaluate the implementation of research control areas as a method to determine the impacts of fishing in the sanctuary. In the meantime, FGBNMS staff will continue to evaluate the potential impacts of allowable fishing gear and may explore additional measures to protect resources in the future.

**Activity 2.4 Work with the U.S. Coast Guard to revise and implement a specific pollutant spill contingency plan for the FGBNMS area.**

Impact from an oil spill or other hydrocarbon release is an ongoing concern. Oil spills and discharges from vessels, pipelines or platforms should be considered threats to the sanctuary resources.

The Oil Pollution Act of 1990 called for the development of a national planning and response system dedicated to oil and hazardous material (HAZMAT) spills. The U.S. Coast Guard has developed Area Contingency Plans (ACPs) for each region of coastal waters. The response tool that includes the federal waters of the sanctuary is the ACP for Southeast Texas and Southwest Louisiana. FGBNMS staff will update and revise the Sub Area Contingency Plan for the sanctuary, which will address spills from vessels and platforms, provides specific information on the sensitive habitat areas and species found within sanctuary boundaries, and scientific recommendations for spill responders. Sanctuary staff will continue to work with the NOAA Scientific Support Coordinator and other area committee members on the revision and adoption of this sub-area plan by the U.S. Coast Guard. The revised plan will be a great asset to the Federal On Scene Coordinator and other coordinating



agencies when making decisions concerning spill response and clean-up of waters in and surrounding the sanctuary.

### **Activity 2.5 Revise regulations to improve protection for sanctuary resources from vessel discharges.**

ONMS proposes to amend the FGBNMS regulations relating to vessel discharges from marine sanitation devices (MSDs) and other sources to make them consistent with industry best management practices and recent vessel discharge regulations implemented for other national marine sanctuaries. ONMS also proposes to require that MSDs be locked in a manner that prevents discharge or deposit of untreated sewage while in sanctuary waters. Requiring that MSDs be locked also provides a practical compliance element for enforcing this prohibition.

The vessel discharge regulation to be proposed for FGBNMS will be consistent with similar regulations recently implemented for other national marine sanctuaries. The regulations would eliminate the existing exception that allows for the discharge or deposit of biodegradable effluents in the sanctuary and eliminate the phrase “routine vessel operations”. NOAA previously determined that the use of the term “biodegradable” potentially raises enforcement and compliance issues. It is not a term that has a recognized legal definition and products are labeled “biodegradable” without reference to a fixed set of standards. NOAA also believes that the phrase “routine vessel operations” lack a legal definition and potentially creates enforcement and compliance issues. To facilitate compliance by clearly identifying what types of discharges or deposits from vessel operations are permitted and focus on those contaminants that pose the greatest threat to water quality, NOAA would require clean deck wash down, clean cooling water, and clean bilge water all be free of detectable levels of “harmful matter” as defined by the regulations. NOAA also proposes to modify the Flower Garden Banks regulations to clarify that only discharges or deposits of clean effluent from properly functioning Type I or II MSDs are allowed in the sanctuary. “Clean” means not containing detectable levels of harmful matter; and “harmful matter” means any substance, or combination of substances, that because of its quantity, concentration, or physical, chemical, or infectious characteristics may pose a present or potential threat to sanctuary resources or qualities. Defining the terms “clean” and “harmful matter” in FGBNMS regulations facilitates compliance and enforcement by providing vessel operators with a definition of what is prohibited, and focuses on the type of contaminants that pose the greatest threat to water quality.

In the future, sanctuary staff will evaluate the potential impacts from other pollutant discharges including ongoing operational effluents from oil and gas facilities, such as drilling lubricants, produced water (water separated from the oil or gas after it is pumped from the source reservoir), and operational discharges (sewage, graywater, deck wash).

### **Activity 2.6 Address the impacts of climate change on sanctuary resources.**

Climate change has been acknowledged as one of the greatest natural threats facing the planet today. ONMS has been entrusted with the stewardship of many of the most ecologically, economically, and socially important marine resources in U.S. waters, and therefore it must act to reduce the threat of climate change on its entrusted resources. To that end, ONMS is preparing to develop climate site scenarios for each site, and to organize and implement a climate action plan at each site that would result in certification as a “Climate-Smart Sanctuary” as a way to indicate they have made certain efforts and achieved a set of standards. Strategies in a climate change action plan would include

research, education and outreach, and adaptive management, as well as green operating standards for transportation, water and energy use efficiency, waste management, and use of supplies.

The certification standards, evaluation process, and certifying body and methods are currently being developed by ONMS and piloted in the Gulf of the Farallones National Marine Sanctuary. In the near future, FGBNMS staff will prepare strategies and activities as part of a site-specific climate change action plan in order to meet ONMS stewardship responsibilities.

**Table 9: Estimated Costs for the Resource Protection Action Plan**

Activity	Estimated Cost (\$000)					Total Estimate 5-Year Cost
	YR 1	YR 2	YR 3	YR 4	YR 5	
(1.1) R/V <i>Manta</i> mission plan	0	0	0	0	0	0
(1.2) Voluntary incident reporting process	2	2	2	2	2	10
(1.3) Joint Enforcement Agreements	0	0	50	50	50	150
(2.1) “Area to be Avoided”	0	0	0	0	0	0
(2.2) Regulations to prohibit attracting, touching, or altering the behavior of rays and whale sharks	0	0	0	0	0	0
(2.3) Protection for resources from fishing gear impacts	0	0	0	0	0	0
(2.4) FGBNMS Sub Area Contingency Plan	0	0	0	0	0	0
(2.5) Regulations to protect resources from pollutant discharges	0	0	0	0	0	0
Total Estimated Annual Cost	2	2	52	52	52	160

Note: Labor and vessel cost estimates are incorporated in the Operations and Administration Action Plan.

**Table 10. Performance Measures for the Resource Protection Action Plan**

<b>Resource Protection Action Plan Activity</b>	<b>Performance Measure</b>	<b>Baseline</b>	<b>Description</b>	<b>Link to National Program Performance Measures</b>
Activity 1.3 Improve interagency coordination on enforcement with federal and state enforcement agencies through Joint Enforcement Agreements.	By 2012, FGBNMS staff will amend the current Joint Enforcement Agreement with the states of Texas and Louisiana to include specific language about enforcement in the sanctuary.	The current JEA with Texas and Louisiana does not include language specific to enforcement in the sanctuary.	The states of Texas and Louisiana are involved with enforcement in the Gulf of Mexico, and a revised JEA would commit to sanctuary-specific enforcement by those state agencies.	Enforcement
Activity 2.1 Consider a process to propose that the International Maritime Organization designate the sanctuary as an "Area to be Avoided."	By 2014, FGBNMS staff will request the IMO to designate FGBNMS as an "Area to be Avoided."	The process to consider this action has not been initiated yet.	n/a	n/a
Activity 2.3 Explore additional protection for resources from fishing gear impacts	By 2016, , after undergoing a separate public review process, FGBNMS staff will publish new and/or revised regulations to increase protection for sanctuary resources from fishing gear impacts.	The FGBNMS sanctuary advisory council has made recommendations to the FGBNMS Superintendent to explore various regulatory changes. A formal public process to consider any of these actions has not yet begun.	n/a	n/a
Activity 2.4 Revise and implement the FGBNMS Sub Area Contingency Plan.	By 2011, NOAA will provide to responders (Coast Guard, contractors) a Sub Area Contingency Plan with detailed scientific recommendations for how to address spills from vessels and platforms.	There is currently an Area Contingency Plan for the Gulf of Mexico, and the Sub Area Contingency Plan for the sanctuary is in progress.	n/a	SHIELDS (Sanctuary Hazardous Incident Emergency Logistics Database)